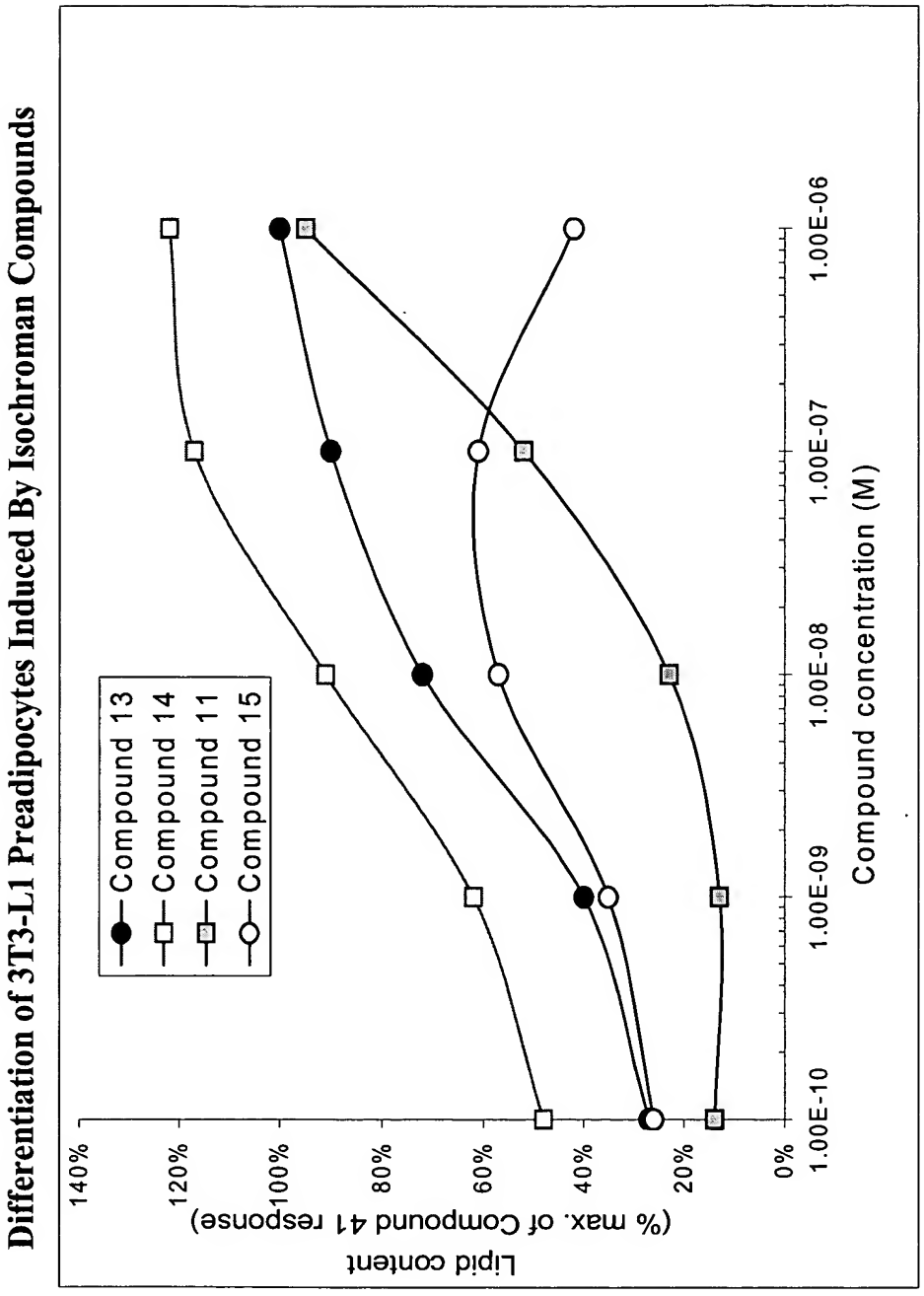
Differentiation of 3T3-L1 Preadipocytes Induced By Isochroman Compounds
Lipid content
(% max. of Compound 41 response)
140%
120%
100%
80%
60%
40%
20%
0%
1.00E-10
1.00E-09
1.00E-08
1.00E-07
1.00E-06
Compound concentration (M)
Compound 13
Compound 14
Compound 11
Compound 15

Figure 1a

Differentiation of 3T3-L1 Preadipocytes Induced By Dihydronapthalene Compounds

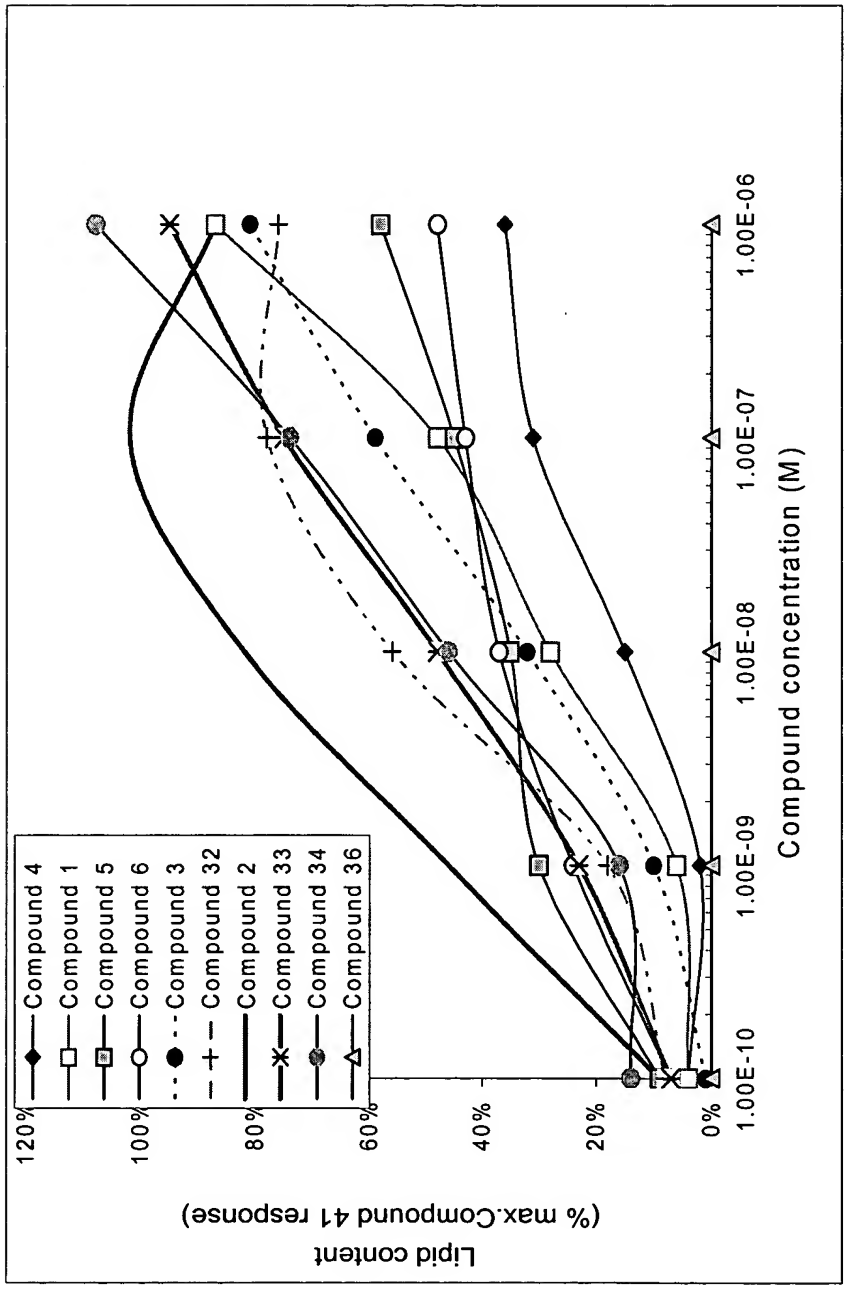

Figure 1b

Serum Glucose and Triglyceride levels in KKA^y Mice Treated With A Dihydronapthalene Compound

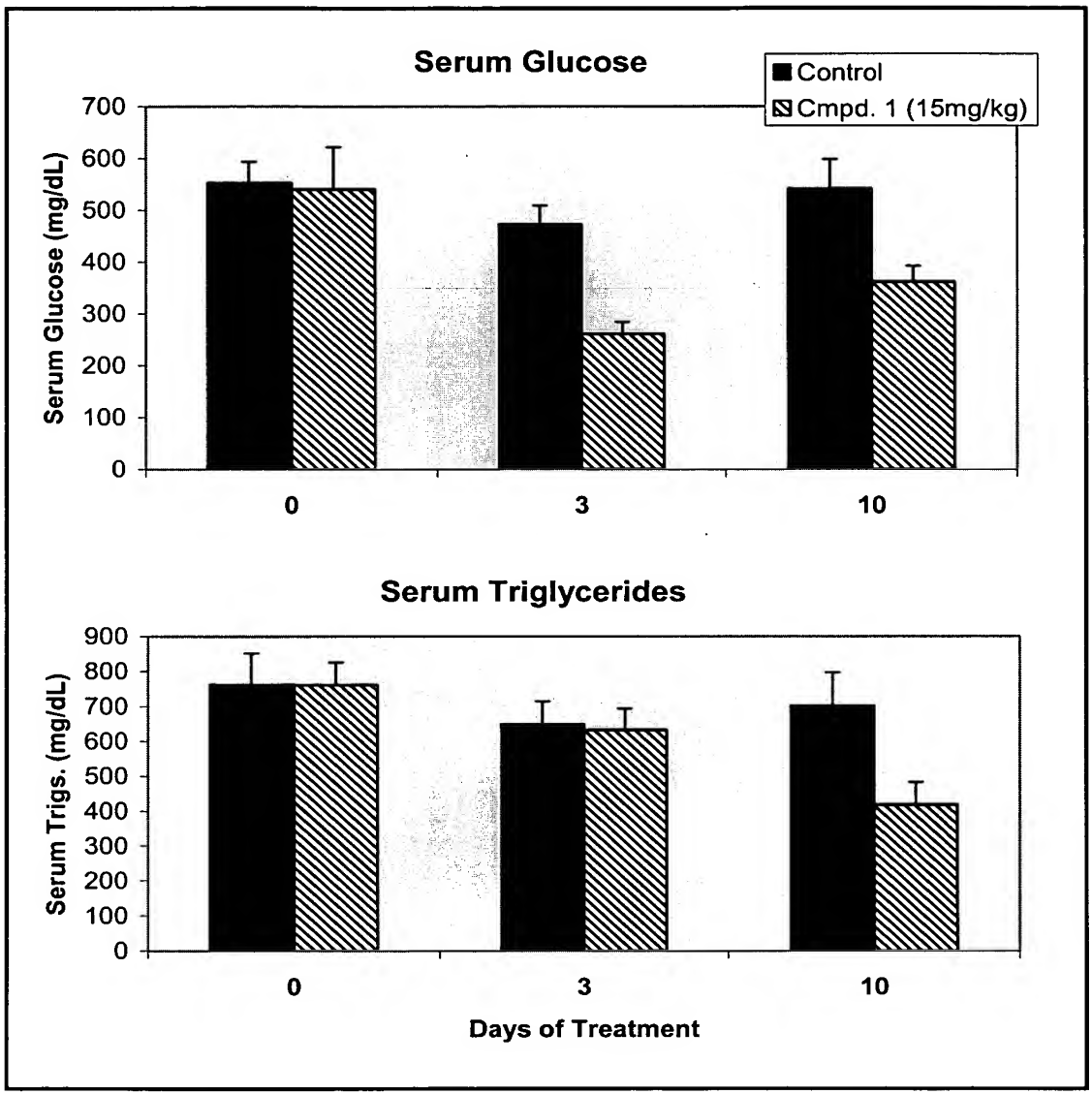

Figure 2a

Serum Glucose and Triglyceride levels in KKA^y Mice Treated With a Dihydronapthalene Compound

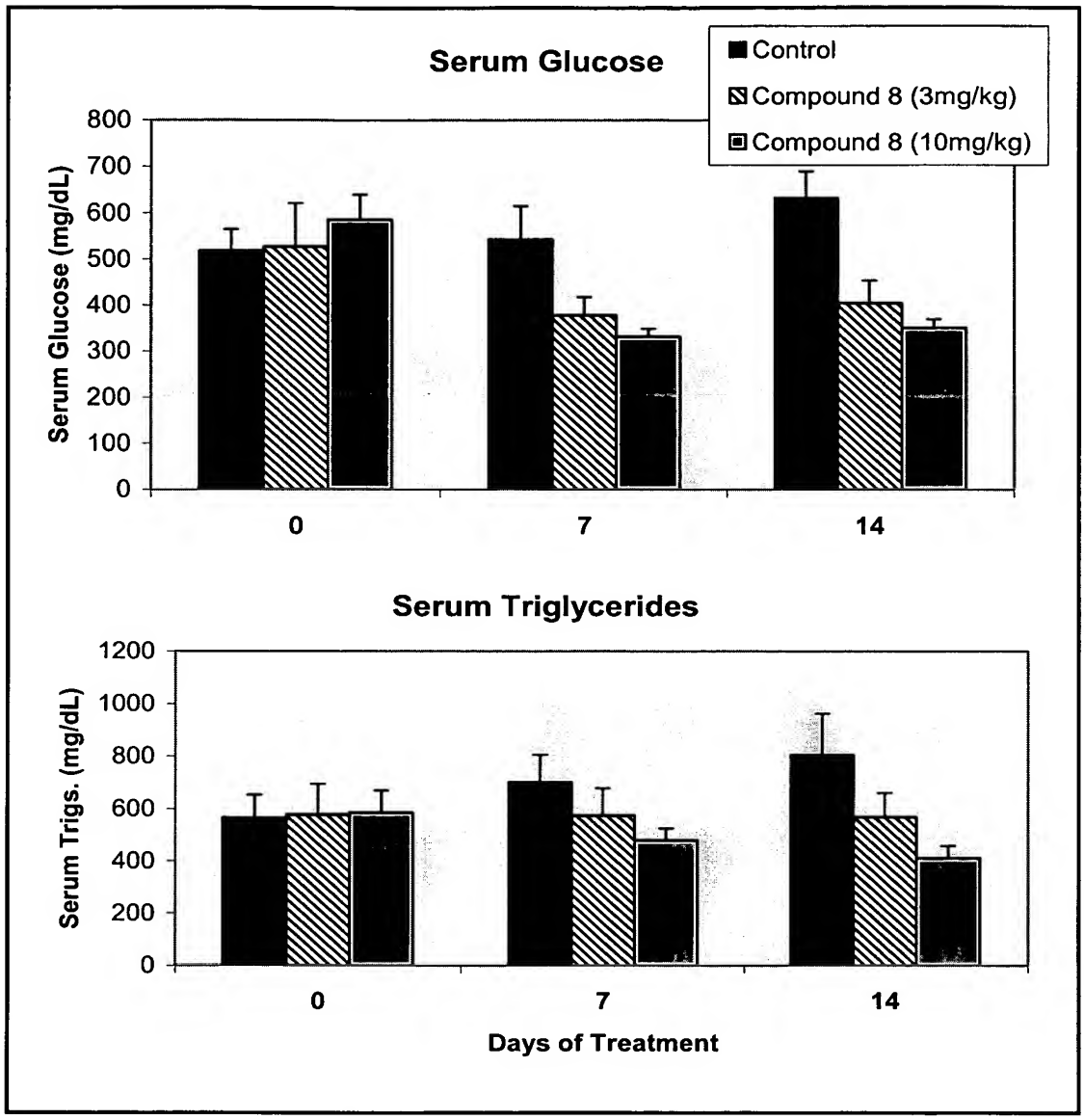

Figure 2b

Serum Glucose and Triglyceride levels in KKA^y Mice Treated With A Dihydronapthalene Compound

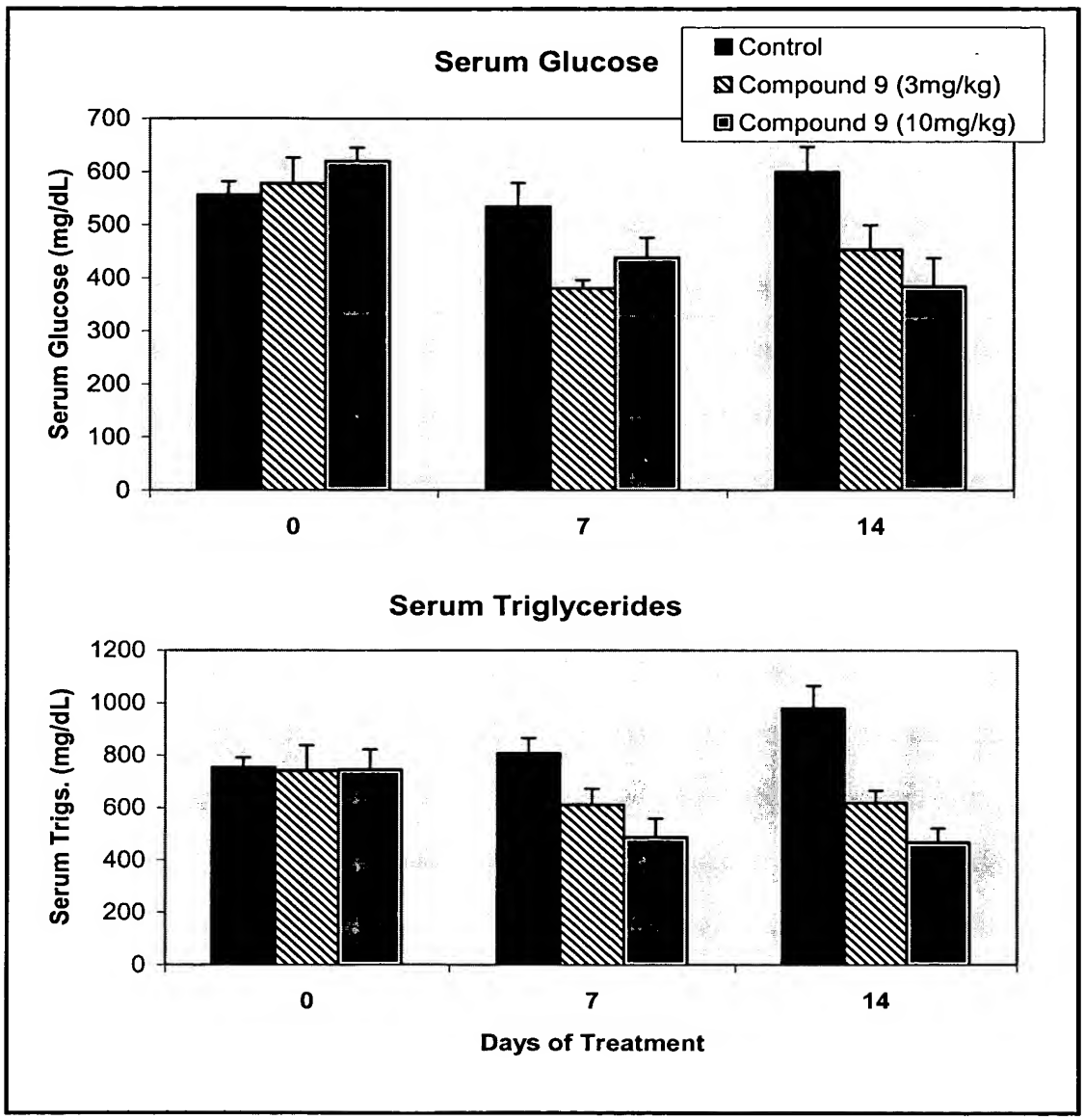

Figure 2c

Serum Glucose and Triglyceride Levels in KKA^y Mice Treated With An Isochroman Compound

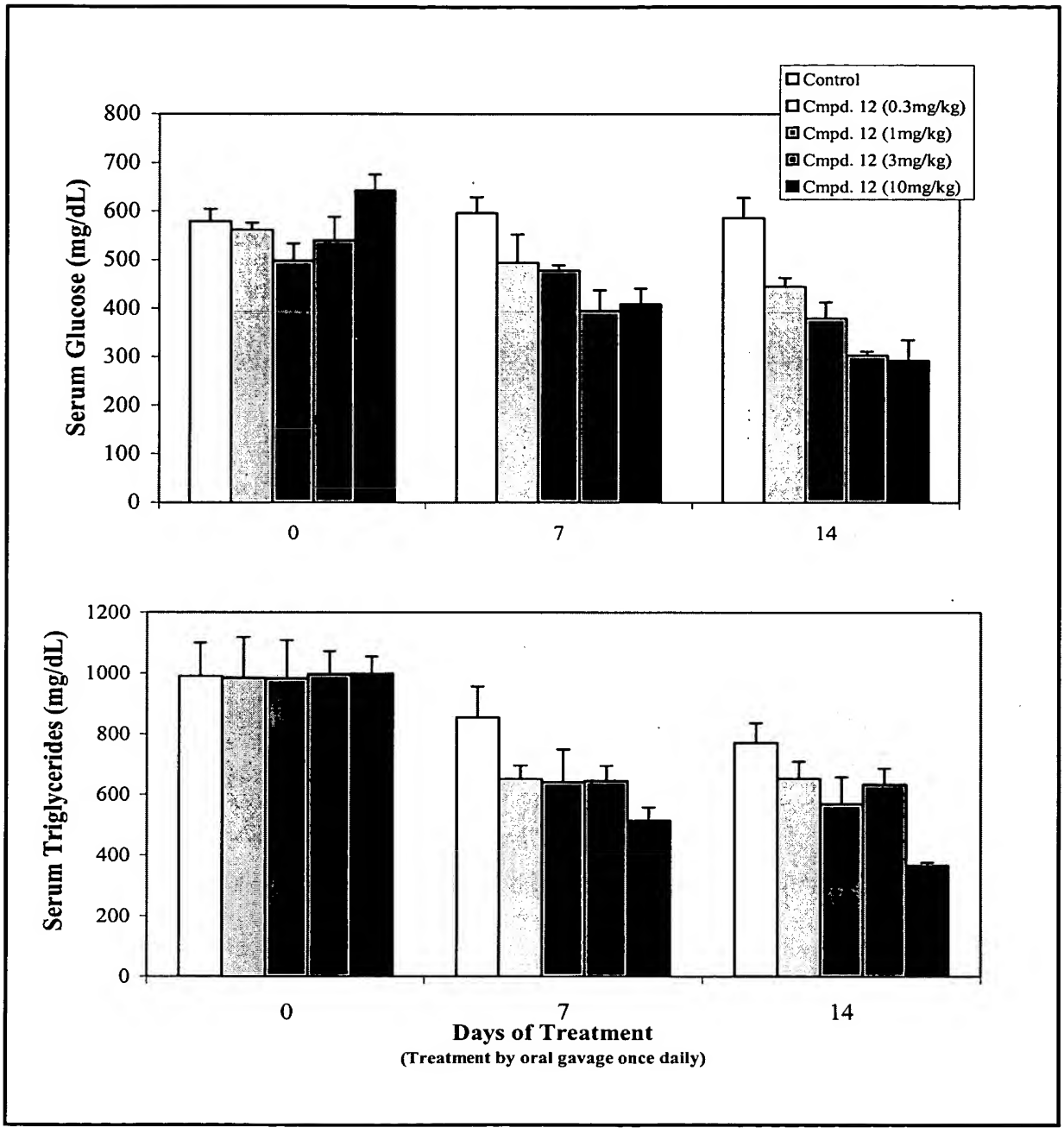

Figure 2d

Cholesterol Efflux from Human Macrophages Treated With An Isochroman Compound

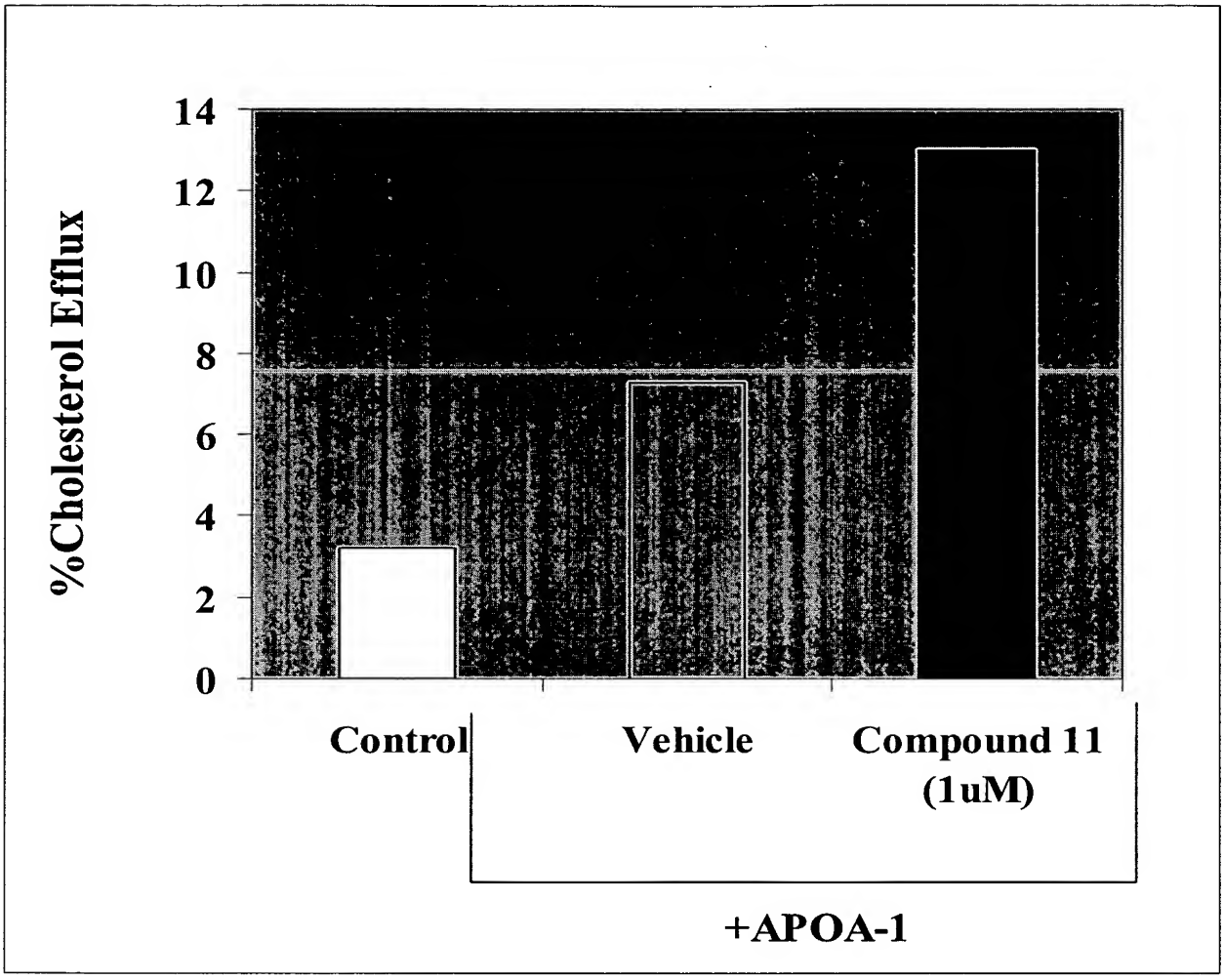

Figure 3

Serum Cholesterol Levels in Diet-Induced Hypercholesteremic Sprague Dawley Rats Treated With A Dihydronaphthlene Compound

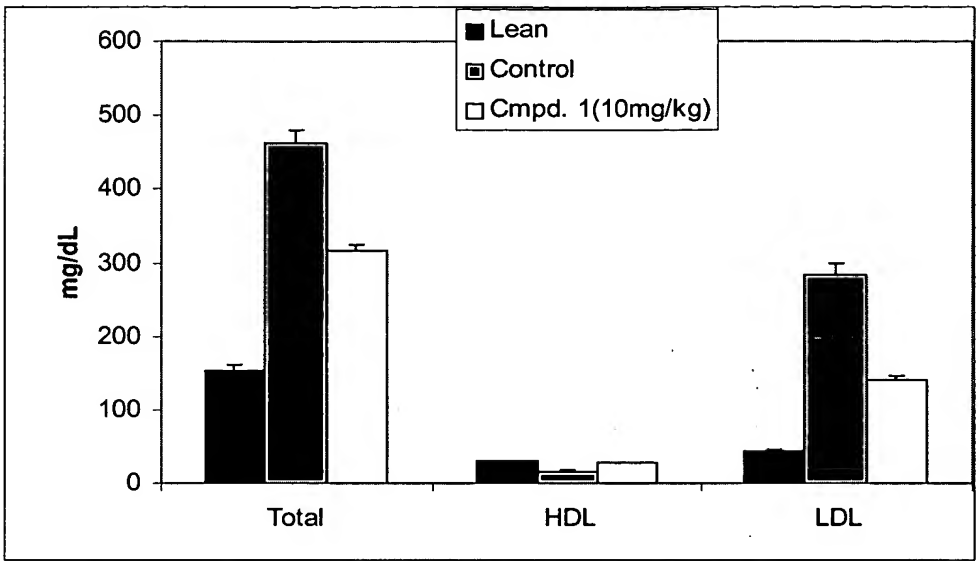

Figure 4a

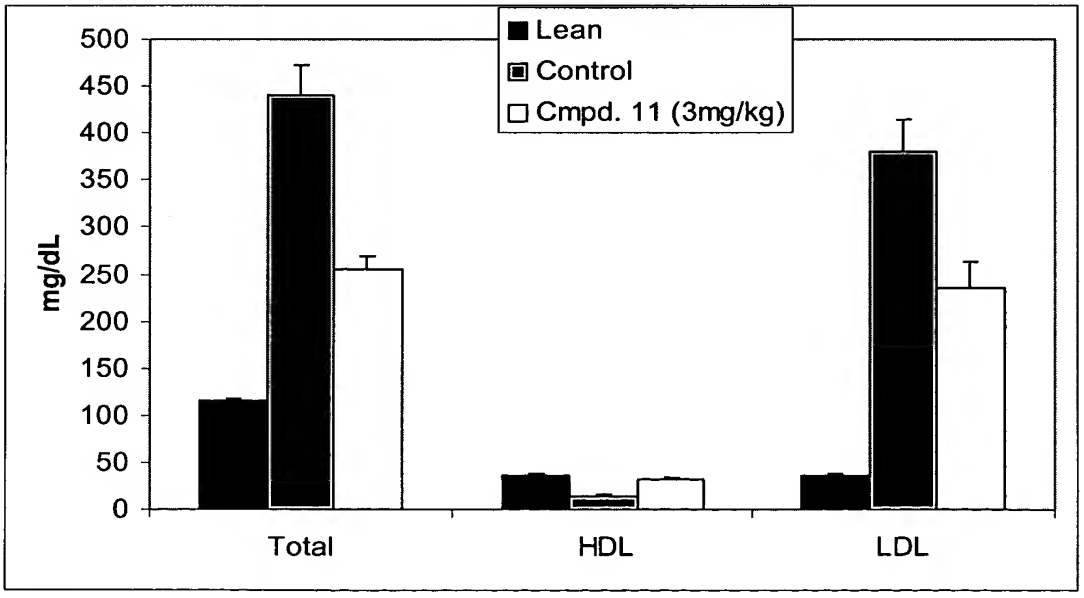

Figure 4b

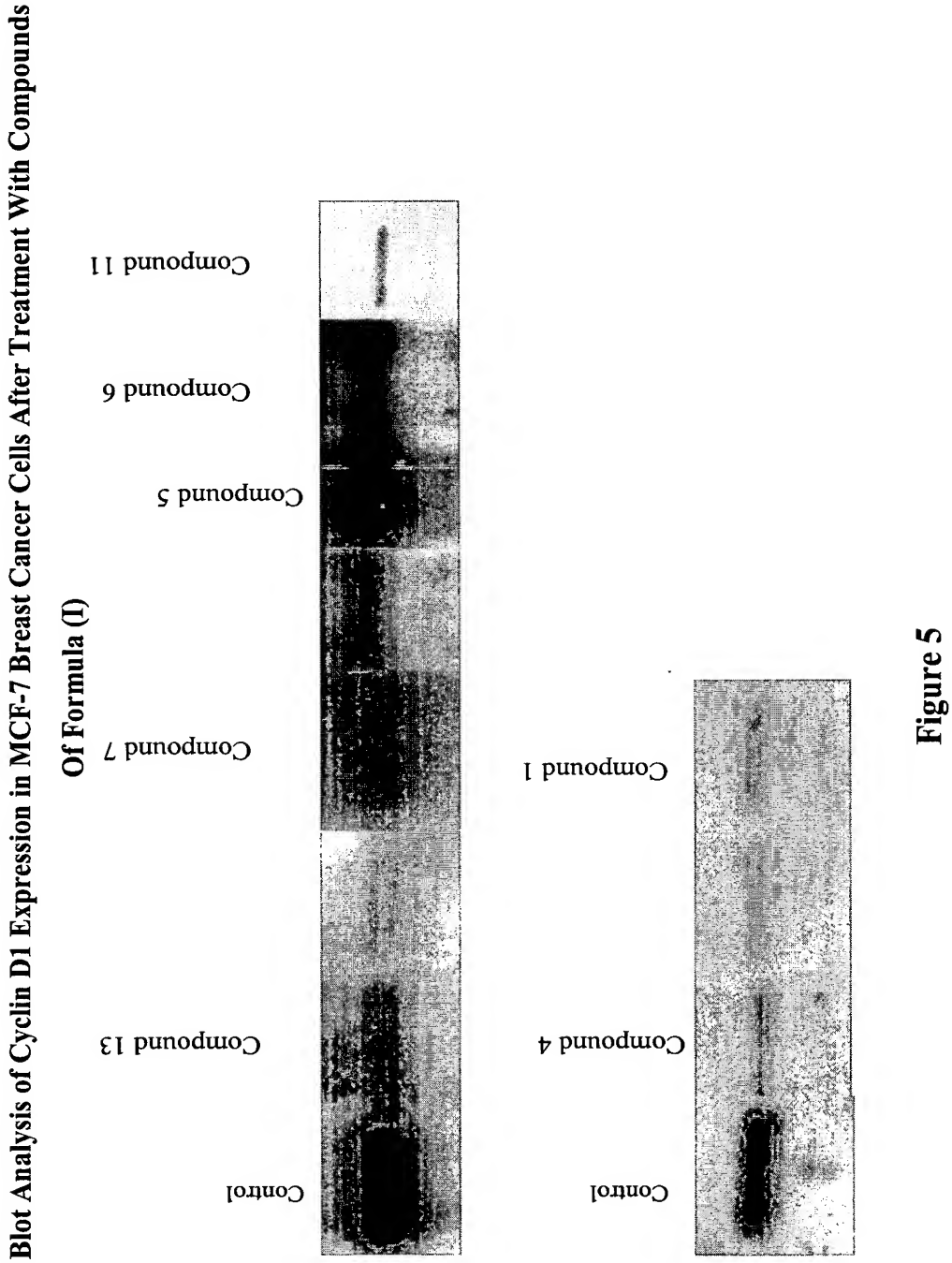
Western Blot Analysis of Cyclin D1 Expression in MCF-7 Breast Cancer Cells After Treatment With Compounds Of Formula (I)
Control
Compound 13
Compound 7
Compound 5
Compound 6
Compound 11
Control
Compound 4
Compound 1

Figure 5

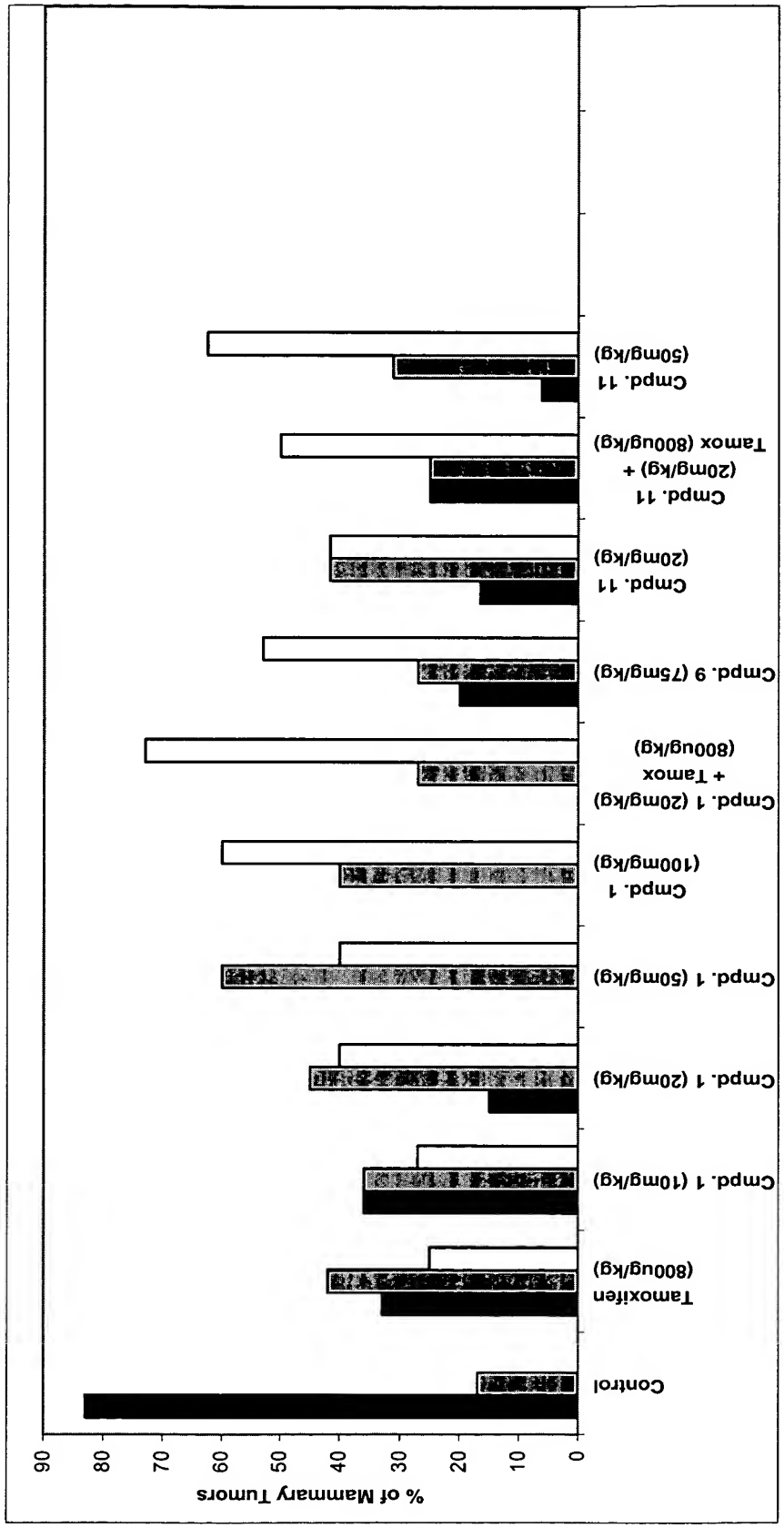
Effect of Compounds of Formula (I) on Progression of Mammary Tumors in Sprague Dawley Rats
% of Mammary Tumors
0
10
20
30
40
50
60
70
80
90
Control
Tamoxifen (800ug/kg)
Cmpd. 1 (10mg/kg)
Cmpd. 1 (20mg/kg)
Cmpd. 1 (50mg/kg)
Cmpd. 1 (100mg/kg)
Cmpd. 1 (20mg/kg) + Tamox (800ug/kg)
Cmpd. 9 (75mg/kg)
Cmpd. 11 (20mg/kg)
Cmpd. 11 (20mg/kg) + Tamox (800ug/kg)
Cmpd. 11 (50mg/kg)

Figure 6

Overall Synthetic Strategy for Synthesis of Compounds of Formula (I_a) and (I_b)

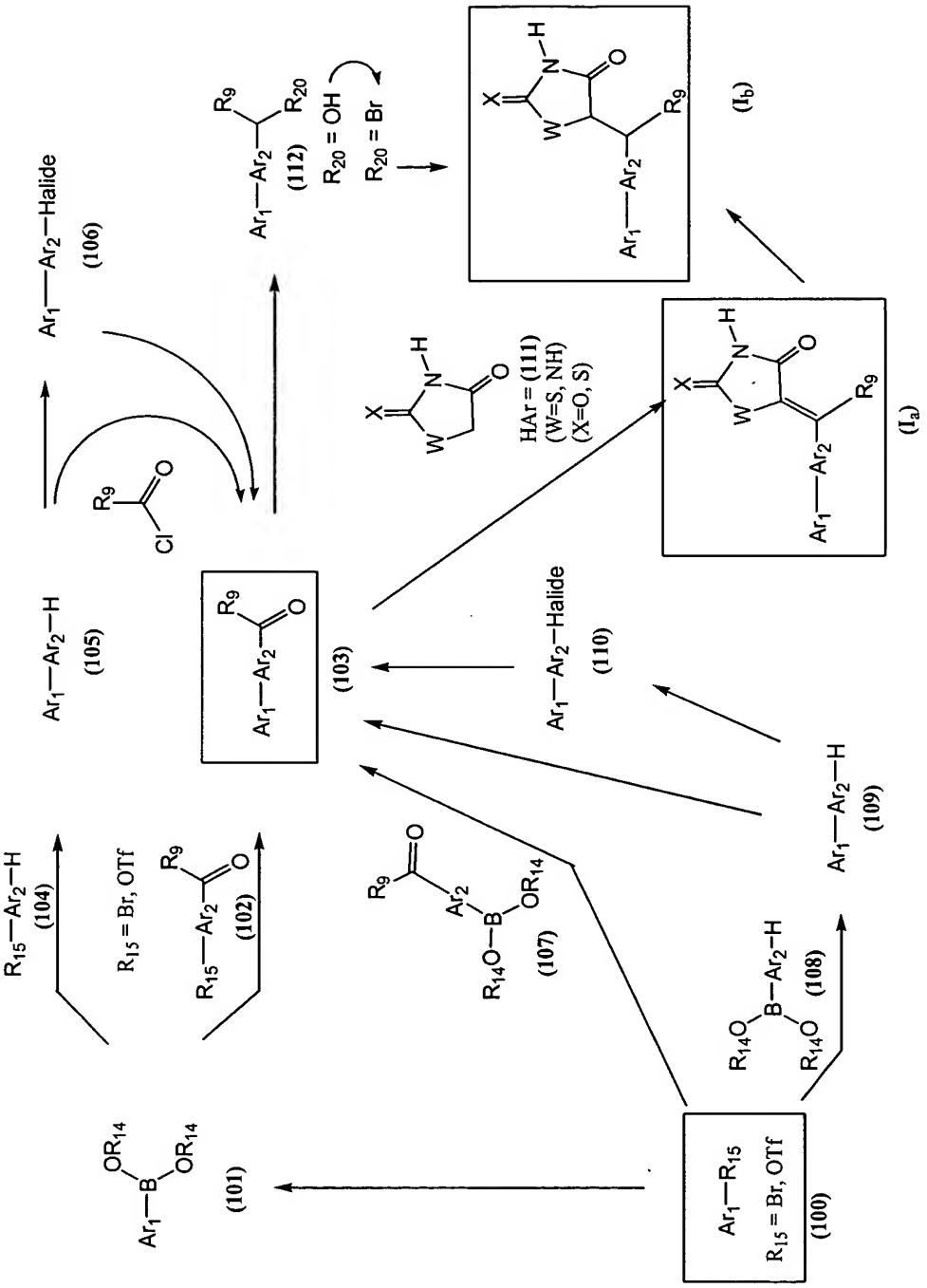

Figure 7

Synthesis of Precursors of Isochromans (Ar_{1e}) and (Ar_{1f})

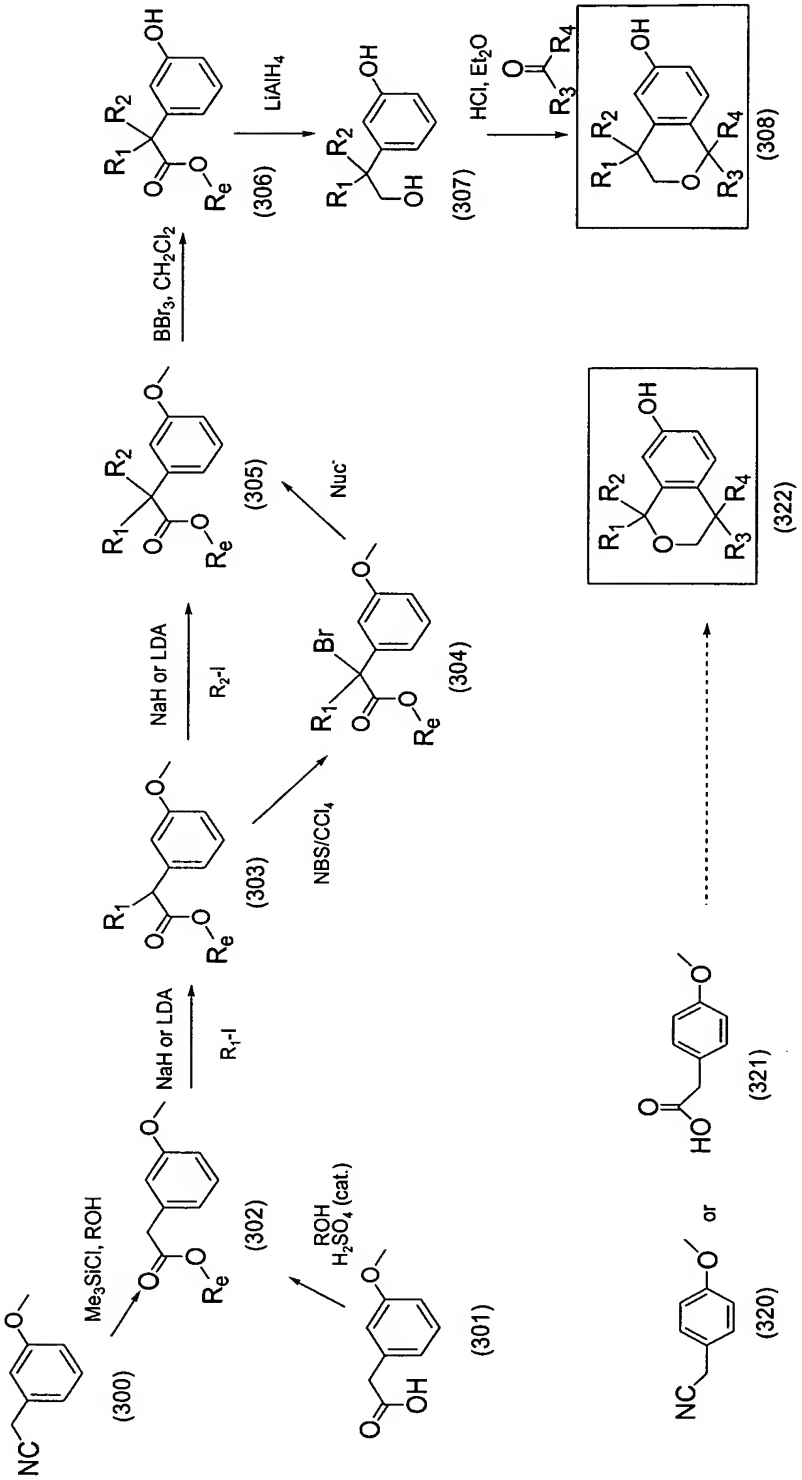

Figure 8

Further Functionalization of Precursors Isochromans (Ar_{1e}) and (Ar_{1f})

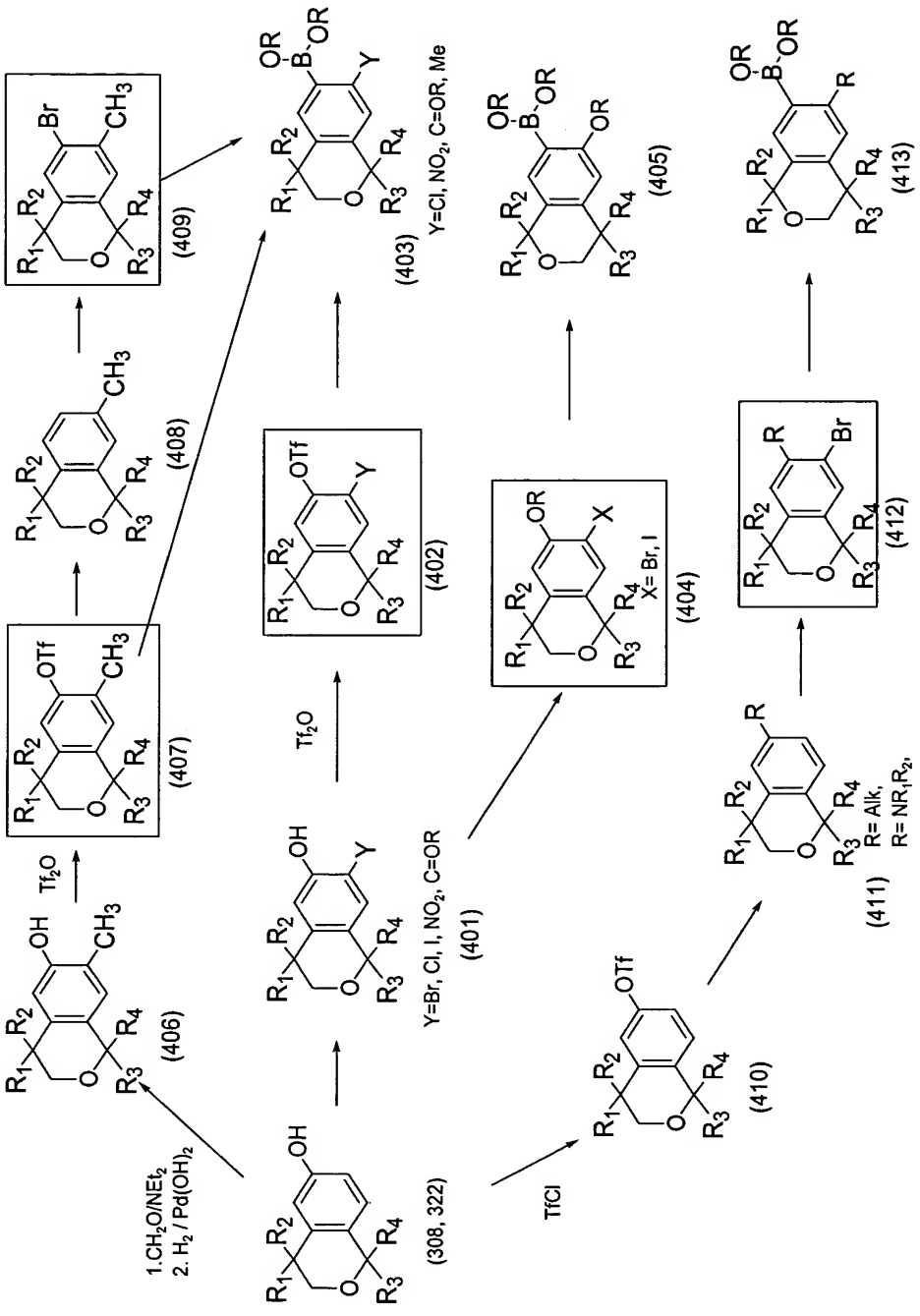

Figure 9

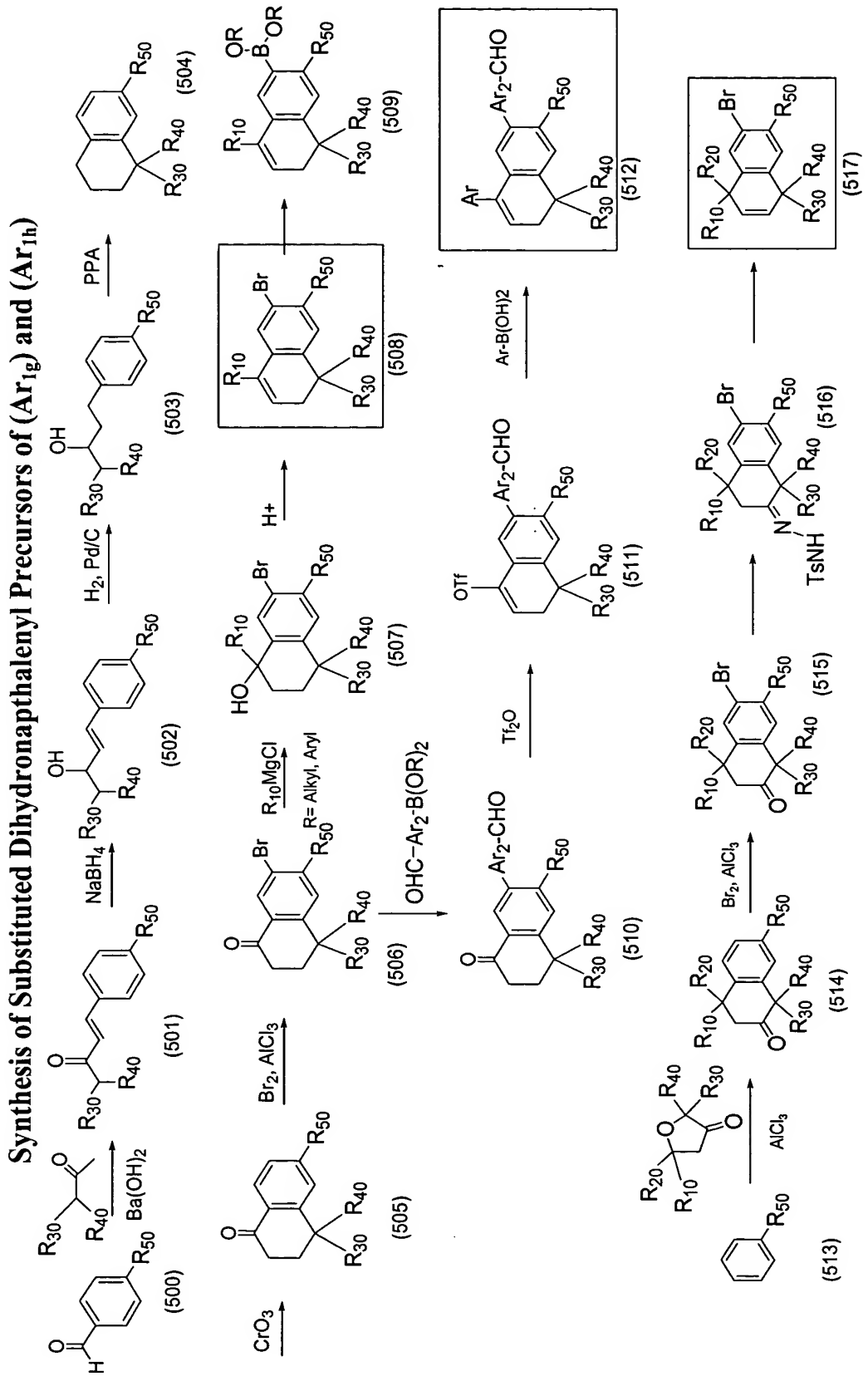
Synthesis of Substituted Dihydronapthalenyl Precursors of (Ar1g) and (Ar1h)
Ba(OH)2
NaBH4
H2, Pd/C
PPA
CrO3
Br2, AlCl3
R10MgCl
R= Alkyl, Aryl
OHC-Ar2-B(OR)2
H+
Tf2O
Ar-B(OH)2
Br2, AlCl3
AlCl3
TsNH
(500)
(501)
(502)
(503)
(504)
(505)
(506)
(507)
(508)
(509)
(510)
(511)
(512)
(513)
(514)
(515)
(516)
(517)

Figure 10